United States Country Comments
Economic Importance
October 2002

We believe that this is a very important standard, however, the current draft uses very complex words and syntax. Working with a writer/editor we attempted to simplify the document without losing the original meaning. We therefore, submit the following changes for consideration.

Glossary of phytosanitary terms
Supplement No. 2

GUIDELINES ON THE INTERPRETATION AND APPLICATION OF *POTENTIAL ECONOMIC IMPORTANCE* AND RELATED TERMS INCLUDING REFERENCE TO ENVIRONMENTAL CONSIDERATIONS

INTRODUCTION

1. Purpose and Scope

These guidelines provide the background and relevant information to define economic terms such as *economic importance* and *economically unacceptable impact*, so that the terms are clearly understood to be consistent with the goals of the International Plant Protection Convention (IPPC) and the International Standards for Phytosanitary Measures (ISPM). The guidelines also show the application of certain economic principles as they relate to the IPPC's objectives in protecting ecosystems, habitats, or species with respect to invasive alien species (intrusive non-native organisms) that are plant pests.

This guideline includes sections on background, references, definitions, requirements, benefits and costs, and applications about the economic terms as they relate to the IPPC and ISPMs. They will help clarify the following:

- That the IPPC accounts for ecological or environmental concerns in both economic and other than economic terms

- That the IPPC maintains the right of members to adopt phytosanitary measures with respect to pests that do **not** necessarily cause quantifiable economic damage to plants, plant products, or ecosystems within the pests' territory

- That the IPPC does **not** assert that market impacts are the sole measure of pest consequences

The scope of the IPPC extends to the protection of cultivated plants in agricultural or

horticultural production environments, non-cultivated plants in managed or semi-managed environments, and plants in non-cultivated or non-managed environments.

2. Background

The IPPC has historically maintained that the adverse consequences of plant pests to ecosystems, habitats, or species are measured in economic terms. References to the terms *economic, economic effects, economic impacts, economic importance* and *economically unacceptable impact* in previous definitions and the use of the word *economic* in various terms in other IPPC documents has resulted in some misunderstanding of these terms and the focus of the IPPC.

3. References

International Plant Protection Convention, 1997. FAO, Rome.
Glossary of phytosanitary terms, 2002. ISPM Pub. No. 5, FAO, Rome.
Guidelines for Pest Risk Analysis, 1996. ISPM Pub. No. 2, FAO, Rome.
Pest Risk Analysis for quarantine pests, 2001. ISPM Pub. No. 11, FAO, Rome.
Regulated non-quarantine pests: concept and application, ISPM Pub. No. 16, FAO, Rome.
Report of the Third Session of the Interim Commission on Phytosanitary Measures (includes the working group document in Appendix XII), 2001. FAO, Rome.

4. Definitions and Abbreviations

Economic analysis: Uses a monetary value as a measure to allow policy makers to compare costs and benefits from different types of goods and services. Encompasses more than the study of market goods and services. Economic analysis does not prevent the use of other measures that do not use a monetary value; for example, qualitative or environmental analysis or economics.

Economic effects: Includes market effects as well as non-market effects, such as environmental and social considerations. Measurement of the economic value of environmental effects or social effects may be difficult to establish. For example, how much is it worth to protect the survival and well being of another species? What is the value of the aesthetics (beauty) of a forest or a jungle? Both qualitative and quantitative worth may be considered in measuring economic effects.

Economic impacts of plant pests: Includes both market measures as well as those consequences that may not be easy to measure in direct economic terms, but do represent a loss or damage to cultivated and non-cultivated plants and plant products.

Economic value: The basis for measuring the cost of the effect of changes in biodiversity, ecosystems, managed resources, or natural resources on human welfare. Goods and services not sold in commercial markets can have economic value.
Determining economic value does not prevent ethical or altruistic concerns for the survival and well-being of other species based on cooperative behavior.

IPPC: International Plant Protection Convention

ISPM: International Standards for Phytosanitary Measures

PRA: Pest Risk Analysis

Potential economic importance: Determine by a pest risk analysis.

Qualitative measures: Distinguishing quality or characteristic that cannot be easily measured in monetary terms, but are essential to consider.

Quantify: Measure in monetary terms.

Quarantine pest: A pest of *potential economic importance* to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

Regulated Non-quarantine pest: A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an *economically unacceptable* impact and which is therefore regulated within the territory of the importing contracting country.

Categorizing Economic Terms in the IPPC and ISPM

The economic terms relevant to *potential economic importance* found in the IPPC and ISPM are categorized below.

Terms requiring judgment:

- *economically important loss* **(**in the definition for *endangered area*)
- *economically unacceptable impact* (in the definition for *regulated non-quarantine pest*)
- *potential economic importance* (in the definition for *quarantine pest*)

Terms requiring evidence:

- *cause economic damage* (in Article VII.3 of the IPPC [1997])
- *commercial and non-commercial consequences* (in ISPM Pub. No. 11)
- *direct and indirect economic impacts* (in ISPM Pub. No. 11 and ISPM Pub. No. 16)
- *economic consequences and potential economic consequences* (in ISPM Pub. No.11)
- *economic evidence* (in the definition for *pest risk analysis*)

- *limit the economic impact* (in the definition for *phytosanitary regulation* and the agreed interpretation of *phytosanitary measure*)

Further, ISPM publications specifically identify the following terms:

- ISPM Pub. No. 2 refers to *environmental damage* as a factor to consider in the assessment of *potential economic importance*. Items such as s*ocial costs* and *crop losses* are also in this listing, and demonstrate the broad scope of *economic impacts* that are intended to be covered.

- ISPM Pub. No. 11 notes that there should be a clear indication that the pest is likely to have an *unacceptable economic impact*, which may include *environmental impact*, in the PRA area (section 2.1.1.5). Section 2.3 of the standard describes the procedure for assessing *potential economic consequences* of an introduction of a pest. Effects may be considered to be direct or indirect. Section 2.3.2.4 provides guidance towards assessing the non-commercial and environmental consequences of pest introduction. This section acknowledges that certain types of effects may not have an existing market that can be easily identified, but goes on to state that the impacts could be approximated with an appropriate *non-market valuation method*. This section notes that if a quantitative measurement is not feasible, then this part of the assessment should at least include a qualitative analysis and an explanation of how the information is used in the risk analysis. Environmental or other undesirable effects of control measures are covered in section 2.3.1.2 (Indirect effects) as part of the analysis of *economic consequences*.

4. Requirements

To take into account environmental concern, in April 2001 the ICPM recognized that under the IPPC's existing mandate, further clarification should include consideration of the following five proposed points relating to potential environmental risks of plant pests:

- reducing or eliminating of endangered (or threatened) native plant species

- reducing or eliminating of a keystone plant species (a species which plays a major role in the maintenance of an ecosystem)

- reducing or eliminating of a plant species which is a major component of a native ecosystem

- causing a change to plant biological diversity in such as way as to result in ecosystem destabilization

- resulting in control, eradication, or management programs that would be needed if a quarantine pest were introduced, and impacts of such programs (e.g. pesticides

or the release of non-indigenous predators or parasites) on biological diversity

5. Benefits and Costs

A general economic test for any policy is to pursue the policy if its benefit is at least as large as its cost. Benefits and costs are broadly understood to include both market and non-market aspects. Costs and benefits can include both quantifiable measures and qualitative measures of costs and benefits. Measurement of non-market goods and services may be difficult to quantify but nevertheless are essential to consider. Benefits and costs should be measured regardless of to whom they occur. Judgments about the preferred distribution of benefits and costs are policy choices.

Economic analysis for phytosanitary purposes cannot judge if one distribution is necessarily better than another distribution of costs and benefits of a specific policy.

Benefits and costs must be counted whether they occur as a direct or indirect result of a pest introduction or if a chain of causation is required before the costs are incurred or the benefits realized. Benefits and costs associated with indirect consequences of pest introductions may be less certain than benefits and costs associated with direct consequences. Often, there is no monetary information about the cost of any loss that may result from pests introduced into natural environments. Any analysis should identify and explain uncertainties involved in estimating benefits and costs and assumptions should be clearly stated.

6. Application

The IPPC maintains the right of its Members to adopt phytosanitary measures with respect to a pest that has the potential to cause environmental damage alone, without a quantifiable damage component. Base such information on a Pest Risk Analysis (PRA). The PRA may include evidence of potential environmental damage as a factor in forming a decision. Environmental damage arising from the introduction of a plant pest is one type of damage recognized by the IPPC. When indicating the direct and indirect impact of pests on the environment, specify the nature of the harm or losses arising from a pest introduction in Pest Risk Analysis.

Pest Risk Analysis (PRA)
The Pest Risk Analysis (PRA) should include certain information. Three criteria in advance of deeming a pest to have *potential economic importance* must include all the following:

- pest has a potential for introduction in the PRA area
- pest has a potential to spread after establishment
- pest has a potential impact on plant health resulting in crop loss; damage to ecosystems, habitats, or species; or a diminished value or loss of some other

specified value (e.g. recreation, tourism, and aesthetics)

In the case of regulated non-quarantine pests, because such pest populations are already established, introduction in an area of concern and environmental effects are not relevant criteria in the consideration of *economically unacceptable impacts* (see ISPM Pub. No. 16: *Regulated non-quarantine pests: concept and application*).